

91. The method of claim 85, wherein the electrolyte solution is acidic.

same as claim 61

92. The method of claim 85, wherein applying the plating voltage step comprises applying a pulsed biasing voltage to the substrate.

same as claim 78

93. The method of claim 92, wherein applying the pulsed biasing voltage comprises applying a positive plating current alternated with a negative de-plating current, the positive plating current being configured to cause deposition of metal inside the features, the negative de-plating current being configured to keep each opening of the features open while the metal is being deposited inside the features by the positive plating current.

same as or claims 81, 83, 84

94. The method of claim 85, further comprising applying a second biasing voltage to the substrate after applying the first biasing voltage and prior to applying the plating voltage, the second biasing voltage being configured to attract metal ions contained in the electrolyte solution near the features.

pg 16, l 26-29

95. The method of claim 85, wherein the second biasing voltage is higher than the plating voltage.

spec. pg 16, l 4-5

96. (Amended) The method of claim 85, wherein the first biasing voltage [is] generates a ramping [voltage] current, and wherein applying the plating voltage step comprises applying a pulsed biasing voltage to the substrate.

97. The method of claim 96, wherein applying the pulsed biasing voltage comprises applying a positive plating current alternated with a negative de-plating current, the positive plating current being configured to cause deposition of metal inside the features, the negative de-plating current being configured to keep each opening of the features open while the metal is being deposited inside the features by the positive plating current.

same as claim 57

Please add the following new claims:

98. (New) The method of claim 86, wherein the ramping current ramps up as the percentage of substrate immersed into the electrolyte solution increases.

99. (New) The method of claim 86, wherein the ramping current increases over time. *pg 16, line 10*
Figure 3

100. (New) The method of claim 86, wherein the ramping current is configured to limit etching by the electrolyte solution of a seed layer disposed on the substrate.

pg 12, l 27-30